



File Code: 4060-3/1950-1

Date: March 12, 2009

Dear Interested Participant:

The Deschutes National Forest is proposing to complete the final establishment and designation of four proposed Research Natural Areas (RNAs) identified in the Deschutes National Forest Land and Resource Management Plan (LRMP): Wechee Butte, Katsuk Butte, Many Lakes, and Headwaters of the Cultus River. All four of these candidate RNAs are described in Appendix E of the 1990 Environmental Impact Statement (EIS) for the Deschutes LRMP. None are adjacent to other ownership. Establishment and designation involves: 1) completion of an environmental assessment to approve the four candidate RNAs with final boundaries and 2) amendment of existing LRMP Standards and Guidelines (Forest Plan p. 4-92 & 93) specifically for these four RNAs. Once finalized, an Establishment Record will be prepared for each the RNAs providing specific background, justification, objectives, and management prescriptions (USDA Forest Service manual 4063.41).

Research Natural Areas are part of a national network of ecological areas designated for research, monitoring, education, and to maintain biological diversity (USDA Forest Service manual 4063). RNA needs were identified originally by Pacific Northwest (PNW) Research Station scientists in the 1960s and early 1970s (USDA Forest Service General Technical Report PNW-38, 1975, Portland, OR 231p) following national agency direction. Extensive surveys for RNAs were conducted in Central Oregon by Dr. Bill Hopkins and other staff in the 1970s and 1980s. Following established agency protocol, their recommendations were further evaluated by Sarah Greene of the PNW Research Station. Public involvement in the selection of the candidate RNAs occurred during the preparation and approval of the Deschutes LRMP in the late 1980s. Field monitoring in 2008 showed that all the features present on site in the late 1980s were still present in 2008. These four candidate RNAs proposed for establishment provide regional representation of relatively natural undisturbed ecological communities (see attachment A).

This environmental assessment will amend the Forest Plan. If approved, it will make boundary changes proposed below and amend the LRMP Standards and Guidelines as proposed following the RNA-specific discussion. The present LRMP boundaries of these RNAs are noted using the term "1990 proposed boundary" in the legends of the attached maps. The term "amended" is used to depict proposed (2009) boundary changes.

**Wechee Butte** is in Township (T.) 20 S., Range (R.) 13E. It is about 18 miles southeast of Bend and 6 miles north of East Lake. It is an undisturbed cinder cone entirely forested with old growth ponderosa pine and lodgepole pine. It provides the only mid-elevation ponderosa pine cinder cone representation within RNAs in the Central East Cascades Ecoregion. Some roads pass through the some of the western edges of the candidate RNA on the flatter terrain below the cinder cone. We propose to modify the western boundary to follow Road 1820 and then the 900 Road in the southwest corner (note: for all RNAs, please see a later section in this letter



describing the proposed buffer between a road or trail and RNA). The proposed area excludes some roads and a portion logged in the 1980s. The proposed boundary change contains the entire cinder cone, the primary purpose of the RNA. The proposed boundary change would add 99 acres to LRMP Management Area 8 General Forest. The 1990 proposed LRMP RNA area is 437 acres; the 2009 proposed amended RNA area is 333 acres (see attached map).

**Katsuk Butte** is in T.18 S., R. 8E. It is located 23 miles west of Bend and 5 miles south of South Sister. It is bounded on the north by Devils Lake and the Cascade Lakes Highway, and on the east by Sparks Lake. The Katsuk Butte RNA provides high elevation, undisturbed and entirely forested cinder cones. The buttes are steep sided and dominated by mountain hemlock. It provides the only post-Mazama forested cinder cone in the white fir zone within RNAs in the Central East Cascades Ecoregion. Some dispersed recreation use occurs along the shore of Devils Lake within the candidate RNA boundary shown in the LMRP EIS. We propose to allow any presently occurring light recreation use along the shorelines of Devils Lake or Sparks Lake that lie within the RNA to continue at this time as long as it continues to not threaten or interfere with the objectives or purposes for which the RNA is being established (USDA Forest Service manual 4063.35). We proposed modifying the irregular boundary shown in the LMRP EIS to one that can be better described and identified, and to include some small wetlands and an entire natural wildfire burn. Mean high water would be used to define lakeshore boundaries. The new proposed boundary would expand west to within 100 feet of the Katsuk Pond Trail connecting Devils Lake and Quinn Meadows. The proposed expansion would come from LRMP Management Areas 11 Intensive Recreation and 13 Winter Recreation. The RNA lies within the West-South Bachelor 1B inventoried roadless area. The 1990 proposed LRMP RNA area is 883 acres; the 2009 proposed amended RNA area is 1,106 acres (see attached map).

**Many Lakes** is in T. 20 S., R.7 E. It is located 34 miles southwest of Bend and immediately to the west of Little Cultus Lake. It is a large bog area, including subalpine permanent ponds and bogs. It provides ecological representation of nine communities in the West Cascades and Crest Ecoregion. While these communities are also represented in one to three other RNAs in Oregon, no other RNA has all nine of these communities. These are also the only representation of these communities within RNAs on the Deschutes National Forest. We propose changes to the irregular boundary shown in the LRMP EIS to include additional or entire wetlands (the primary purpose of the RNA designation), some upland buffers next to springs and other wetlands, and otherwise straighten some lines to have a boundary that can be described by point coordinates. The proposed boundary change would include all of the wetland northwest of Little Cultus rather than bisecting it, and would include a portion of the west shoreline of Little Cultus not used by recreationists. The boundary would be at least 250 feet from the nearest Little Cultus campsite and would be at least 100 feet west-southwest of the Deer Lake trail. Recreation use of the candidate RNA, including the proposed expansion, is very light with little on-the-ground evidence of use. The proposed expansion would come from LRMP Management Areas 9 Scenic View Partial Retention Foreground. The RNA lies within the Waldo 1B inventoried roadless area, with the 2009 proposed amended RNA expanding into the adjacent Waldo 1C inventoried roadless area. The 1990 proposed LRMP RNA area is 750 acres; the 2009 proposed amended RNA area is 907 acres (see attached map).

**Headwaters of the Cultus River** is in T.20 S., R. 8E. It is located 30 miles southwest of Bend and two miles east of Cultus Lake. The central feature of the RNA is the large spring that emerges from the base of Bench Mark Butte. The butte has old growth ponderosa pine.

Engelmann spruce dominates the riparian zone along the river. This RNA provides representation of three communities in the Central East Cascades Ecoregion of which two are only represented in this RNA (Engelmann spruce bottomland, and flowing and pooled cold springs). We propose a modification of the north boundary from an irregular line to one that follows the 200 Road and is describable by point coordinates. The 208 Spur Road will be included within the RNA as it is not drivable and is no longer maintained. The proposed change of the north boundary would add and subtract from LRMP Management Areas 8 General Forest and add to LRMP Management Area 3 Bald Eagle. The 1990 proposed LRMP RNA area is 315 acres; the 2009 proposed amended RNA area is 333 acres (see attached map).

### **Proposed Management Guidelines**

These RNAs will generally be managed to allow natural processes to occur and to minimize human disturbance (USDA Forest Service manual 4063.3). As mentioned, specific on-going light recreation use described above will be allowed to continue at this time as long as it continues to not threaten or interfere with the objectives or purposes for which the RNA is being established (USDA Forest Service manual 4063.35), and will be periodically monitored. Existing Standards and Guidelines in the Deschutes LRMP (Forest Plan p. 4-92 & 93) will continue to apply to these four RNAs except as amended below or by national policy (USDA Forest Service Manual 4063; e.g., conservation of biodiversity is now also a goal).

1990 LMRP Standard and Guideline	Proposed LMRP Amendment for Wechee Butte, Katsuk Butte, Many Lakes, and Headwaters of the Cultus River RNAs
Wildfire M2-17 Unless plans approved by the Station Director provide for letting natural fires burn, aggressive containment using low impact methods should be used. High impact methods will be used only to prevent a total loss of the Research Natural Area. Mop up should be minimized with natural burnout being the preferred method.	Wildfire M2-17. If naturally-ignited fires (lightning) occur, they may be allowed to burn in all four of these RNAs if the fires will accomplish the establishment objectives of a specific RNA and help maintain natural processes (known as “wildland fire use”). Fire suppression may be done to maintain the values or objectives of a specific RNA. In that event, aggressive containment using low impact methods should be used. High impact methods will be used only to prevent a total loss of the Research Natural Area. Mop up should be minimized with natural burnout being the preferred method.
Prescribed Fire, M2-18. Prescribed fire will be used only as specified in approved Research Natural Area management goals.	Prescribed Fire, M2-18. Prescribed fire may be used where it will accomplish the establishment objectives of the specific RNA
Fuel Loading M2-19. Fuels will be allowed to accumulate at natural rates.	Fuel Loading M2-19. Where ecologically appropriate, prescribed fire may be used

1990 LMRP Standard and Guideline	Proposed LMRP Amendment for Wechee Butte, Katsuk Butte, Many Lakes, and Headwaters of the Cultus River RNAs
	to reduce unnatural fuel accumulations from past fire suppression. For example, fuels in old growth ponderosa pine may be reduced to levels likely present with recurring natural wildfire and thereby better protect old growth trees from future wildfire.
Forest Health M2-21. Monitor the areas to detect pest problems which could destroy the Research Natural Areas or cause damage to adjacent lands. Reintroduction of fire should be considered to reduce possible insect epidemic conditions.	Forest Health M2-21. Monitor the areas to detect pest problems which could destroy the Research Natural Areas or cause damage to adjacent lands. Reintroduction of fire should be considered to reduce possible insect epidemic conditions. Management actions commensurate with RNA objectives may be taken to control or eradicate noxious weeds or exotic species, including the use of herbicides or biological control organisms. Any pest management activities will be as specific as possible against target organisms and will be designed to induce minimal impact to other components of the ecosystem.

All RNA boundaries will be at least 100 feet from the centerline of a Forest Service system road or trail if the road or trail is shown as the boundary of the RNA on the attached maps. This managed buffer will permit hazard tree removal to maintain public safety for those traveling the roads or trails, permit the maintenance of a fuel break if needed to protect the RNA or adjacent forest from catastrophic wildfire, and facilitate the use of prescribed fire if desired. Due to a steep slope, the northeast boundary of Katsuk Butte RNA will be at least 200 feet from the Cascade Lakes Highway for the same reasons. Final RNA boundaries will be described using point coordinates or actual land features (e.g., lake, road, trail).

All management actions (e.g., wildland fire use, prescribed fire, noxious weed control) must be approved by the PNW Station Director with the concurrence of the Forest Supervisor. At present no noxious weeds are known to occur in any of the four RNAs.

The Deschutes LRMP Standard and Guideline for Minerals (M2-11, Forest Plan p. 4-93) directs that RNAs be withdrawn from mineral entry for mining claims. The National Forest intends to pursue an application to the Bureau of Land Management for minerals withdrawals for these four candidate RNAs if funding for this become available.

While these Environmental Assessments will amend the Deschutes NF LRMP, the proposed RNA boundary modifications will not have a measurable effect on Forest Plan goals, objectives, or outputs. The effects of the RNA designations will be disclosed in four separate Environmental Assessments and will be considered, along with public comments, in making the decisions.

The four Environmental Assessments will be made available for a 30-day public comment period later this year. The Deciding Officer is the USDA Forest Service Region 6 Regional Forester who will approve any new RNAs with the concurrence of the PNW Station Director.

If you have comments regarding these proposals, or would like additional information, please contact Robin Vora, Forest Research Natural Area Coordinator, 1001 SW Emkay Dr., Bend, OR 97702 (541-383-5766). We look forward to your participation.

Sincerely,

*/s/ John Allen*  
JOHN ALLEN  
Forest Supervisor

cc: Shane Jeffries  
Charmane Powers  
Todd Wilson  
Susan Skakel  
Beth Peer  
Robin Vora  
Sean Ferrell  
Katie Grenier  
Gery Ferguson  
Leslie Moscoso  
Marvin E Lang  
Rick Dewey  
Sue Olson  
Margot Bucholtz  
Tom Spies  
Charles G Shaw  
Tom DeMeo  
Raymond Romero  
Mike Johnson  
Dick Brainerd  
Reid Schuller  
jimmy.kagan